US ERA ARCHIVE DOCUMENT

Toxicology Branch

125301

Date Out EFB: 28 JUL 1983 TO: Gardner/Heyward Product Manager 17 TS-767 FROM: Dr. Richard Moraski Acting Chief Review Section No. 1 Exposure Assessment Branch Hazard Evaluation Division Attached please find the environmental fate review of: Reg./File No.: 35977-EUP-2 Chemical: Ro 13-5223 (Fenoxycarb) Type Product: Insect Growth Regulator Product Name: Ro 13-5223 1% Fire Ant Bait Company Name: Maag Agrochemical Co. Submission Purpose: Review data submitted to previous review ZBB Code: Other ACTION CODE: 714 Date in: 6/16/83 EFB # 3423 Date Completed: 7/28/83 TAIS (level II) Days 64 Deferrals To: Ecological Effects Branch XXXXXXX Residue Chemistry Branch

1.0 INTRODUCTION

Magg Agrochemicals has submitted an amendment to the Experimental Use Permit No. 35977-EUP-2 issued to allow testing of the pesticide Ro-13-5223 1% Fire Ant Bait (fenoxycarb, as a.i.). In this amendment Maag is requesting permission to (1) treat 200 acres additional acres in the State of Georgia (and cancel the use on 200 acres in Arkansas) and (2) allow treatment of pasture with a "rotational interval" of seven days at one of the two Florida sites to study the effects on non-target ants.

Also, a corrected copy of the previously submitted report "Field Dissipation Study of Ro-13-5223 When Applied to Pasture Grass as a Fire Ant Bait, US82-AL.2, September 15, 1982"; a study entitled "Field Dissipation Study of Fenoxycarb (Ro 13-5223) When Applied to Pasture Grass as a Fire Ant Bait at Expected Use Rates, US83-AL.2, May 12, 1983"; and some observations on bait reboval by fire ants were also submitted.

1.1 Chemical

Common name: Ro 13-5223, Fenoxycarb

Chemical name: Ethyl [2-(p-phenoxyphenoxy)ethyl] carbamate

Chemical structure:

2.0 DIRECTIONS FOR USE

EAB asumes there is no change in use direction since the previous EAB review January 6, 1983:

Lawns, turfs and 1.0 to 1.25 lb./A Broadcast uniformly non-crop areas with air or ground equipment

3.0 DISCUSSION OF DATA

3.1 In a telephone call (7/26/83) to Magg Agrochemical Co., Mr. Richard Stanton, explained that the 7 day "rotational interval" requested was the time that cattle will be taken off the treated pasture after treatment. According to the submitted amendment, the treatment of pasture with the stated rotational interval would not be expected to result in residues in food or feed or any hazard to man or domestic animals.

Conclusion

EAB defers to Residue Chemistry Branch as to the adequacy of the proposed time interval after treatment such that no residues will be expected in residues of food or feed.

This request does not affect EAB review.

- 3.2 The field dissipation studies are not reviewed at this time since they are not required for the EUP. However, some observations can be made:
- 3.2.1 The studies are deficient in that no data on the soil characeristics (classification, % composition, % organic matter, pH, CEC, etc.) and climatic conditions (rainfall and temperature data) during the course of the study.
- 3.2.2 Length of time soil samples were frozen before analysis should be reported. If soil was stored frozen for an extended length of time then storage stabilly data will be required that degradation did not occur during storage.
- 3.2.3 Ro 13-5223 (Fenoxycarb) 1% Fire Ant Bait: Rate of Removal From Treated Fields. Interoffice Correspondence: J. Thomas Bridges/Dr. R. H. Stanton, May 11, 1983.

EAB Comment: This study is inadequate in that no data were included to support the conclusion/observation that the bait was very rapidly taken up into the mounds. The study would be considered ancillary.

3.2.4 EAB notes the correction in the previously submitted study on field dissipation. This corrected study should either be resubmitted or referenced in the application for registration when submitted.

The correction concerns the application rate. It was previously reported as 251 g ai/ha. The correct rate is 1.34 kg ai/ha.

3.3 The registrant should be informed that, if forest use is to be requested, either a forest dissipation study or an adequate justification for waiver from the requirement of the study must be submitted. Such a waiver may be based on low application rates such that residues levels are expected to be below the sensitivity of the analytical method.

In lieu of the forest dissipation study or waiver request, a label restriction prohibiting the application to forest areas will be required.

- 4.0 RECOMMENDATION
- 4.1 EAB has no objections to adding 200 acres in Georgia and canceling the 200 acres in Arkansas
- 4.2 EAB defers to Residue Chemistry Branch as to the adequacy of the 7 day interval for cattle being allowed into the treated field.
- 4.3 The field dissipation studies should be resubmitted or referenced in the application for registration when submitted for review.
 - 4.3.1 The registrant should be informed of EAB comments listed in 3.2, above.

Note to PM: In the telephone conversation with R. Stanton, Maag Agrochemicals, I stated that if there were questionss concerning environmental fate data requirements for this chemical, EAB would meet with their representatives to discuss them.

Clinton Fletcher

Review Section No. 1

Exposure Assessment Branch Hazard Evaluation Division